TITLE: STRUCTURAL ENGINEER

DEFINITION: Under direction, gives instruction and performs responsible professional structural engineering design and review for approval of structural plans, design and specifications including buildings, bridges, and marine structures.

EXAMPLES OF DUTIES:

- Performs professional structural engineering reviews of building plans, design and specifications for compliance with building code requirements, City ordinances and State and Federal statutes pertaining to structural, heating and sound installation, energy standards, fire resistance, and occupancy safety;
- Personally checks the structural calculations and designs of the highest complexity requiring a working knowledge of sophisticated design procedures;
- Performs professional structural engineering design of complex structures for placement on land or in water, consisting of structural analysis, evaluation, and material selection of concrete, steel, or timber structures;
- Conducts analysis of seismic effects on structures and participate in developing design approaches for structural seismic design;
- Provides structural engineering staff-advisory service;
- Consults with architects, contractors and other engineers on structural design and code requirements;
- Works with field building inspection staff on activities relating to both building plan detail approvals and construction procedures;
- Coordinates architectural and structural plan development with electrical, mechanical and plumbing plan checking processes;
- Performs special studies and assists in formulation and preparation of technical charts, etc., for plan checking and inspection staff;
- Possesses knowledge of current seismic design and evaluation methodology;
- Completes reviews of plans with specific deadlines;
- Performs other related duties as required.

MINIMUM REQUIREMENTS:

Registration as a Structural Engineer in the State of California

Graduation from an accredited college or university with specialization in civil engineering or a closely related field, or possess an E.I.T. certificate from the State of California and four or more years of professional engineering experience related to the structural field.

Ability to communicate effectively, both orally and in writing.

Ability to work effectively with internal and external customers.

DESIRABLE QUALIFICATIONS:

Experience with AutoCad or MicroStation software.

HISTORY:

Approval/Adoption Dates: 06/13/80 - Human Resources Department

Revised by Human Resources: 12/20/01 Approved by Civil Service Commission: 01/16/02